



GovEnergy 2008

*Hot Solutions for
Prickly Problems*

NYSERDA

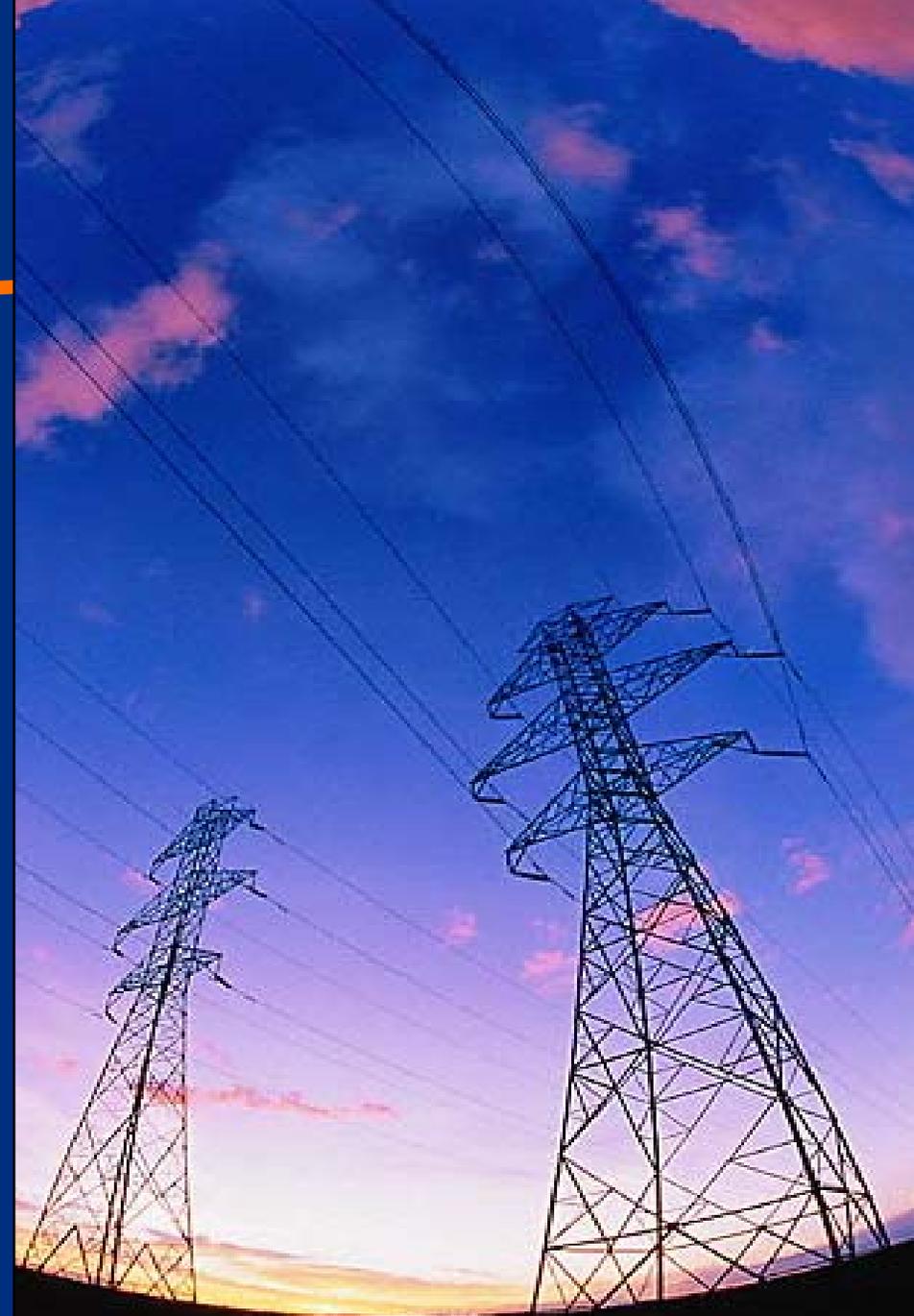
New York State
Energy Research and
Development Authority



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- Overview of NYSERDA Responsibilities
- Statewide Initiatives
- Accomplishments
- Methodology
- Program Areas
- Keys to Success
- Overview of STEP
- Q&A



New York State Energy Research and Development Authority (NYSERDA)



- Established in 1975 by State Legislature
- Mission: To use innovation and technology to help the State solve some of its most challenging energy and environmental problems in ways that promote economic development
- Forge public/private partnerships: across all sectors & stakeholders
- Provide financial and technical assistance through a wide range of competitive solicitations



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NYSERDA Responsibilities

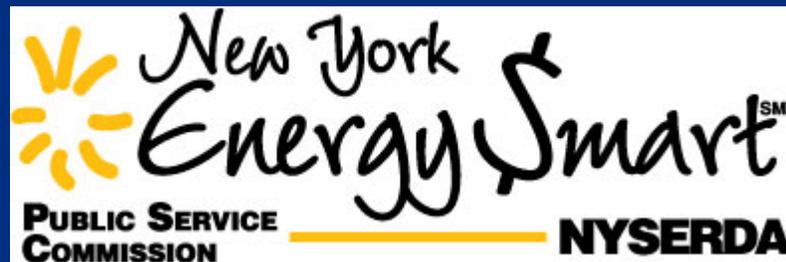
- Deploy energy-efficient technologies (SBC & EEPS)
- Energy planning and analysis, coordinate State's activities with other State agencies
- Renewable Portfolio Standard (RPS)
- Research & Development
- Saratoga Technology + Energy Park – STEP
- Annual program funding of \$400+ million





New York State Initiatives

- System Benefits Charge (SBC)
- Renewable Portfolio Standard (RPS)
- Governor Paterson's 15 by 15
- Energy Efficiency Portfolio Standard (EEPS)
- Renewable Energy Task Force
- Regional Greenhouse Gas Initiative (RGGI)





System Benefits Charge Public Policy Goals

- Improve system-wide reliability and increase peak electricity reductions
- Improve energy efficiency and access to energy options
- Reduce the environmental impacts of energy production and use
- Facilitate competition in the electricity markets

Major Program Accomplishments



- Annual energy bill savings of \$580 million, includes electricity, natural gas, and oil
- Reduced air pollution by 2,600 tons of NO_x, 4,760 tons of SO_x, 2,020,000 tons of CO₂
- CO₂ reduction equivalent to removing 405,000 automobiles from New York roads
- 4,700 jobs created/retained in New York State Reduced annual statewide electric energy requirements by 3,100 GWh
- Peak-Demand Reductions of 1,210 MW permanent/callable
- Enhanced electric system reliability with 106 GWh of renewable resources
- Over \$250 million in product sales



Energy Efficiency Assistance Provided to Market Place



Upstream

Industry
Processing
Trade Associations

Midstream

Wholesalers
Energy companies
Equipment suppliers
Trade professionals

Downstream

Consumers
Final consumption

Manufacturing

RD&D
Proof of concept
Product development
Demonstration
Testing
Manufacturing

**Distributors
& Vendors**

Information
Training
Financial incentives
(sales and stocking)
Marketing assistance

Retailers

Information
Training
Financial incentives
(sales and stocking)
Marketing assistance

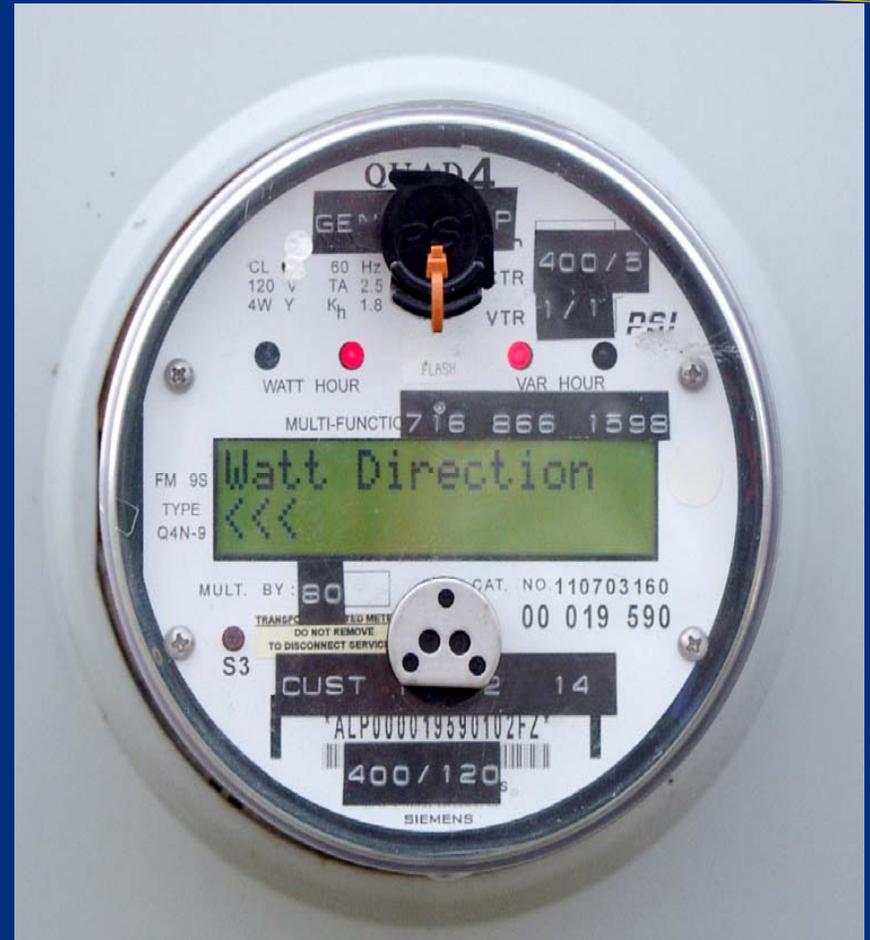
End-Users

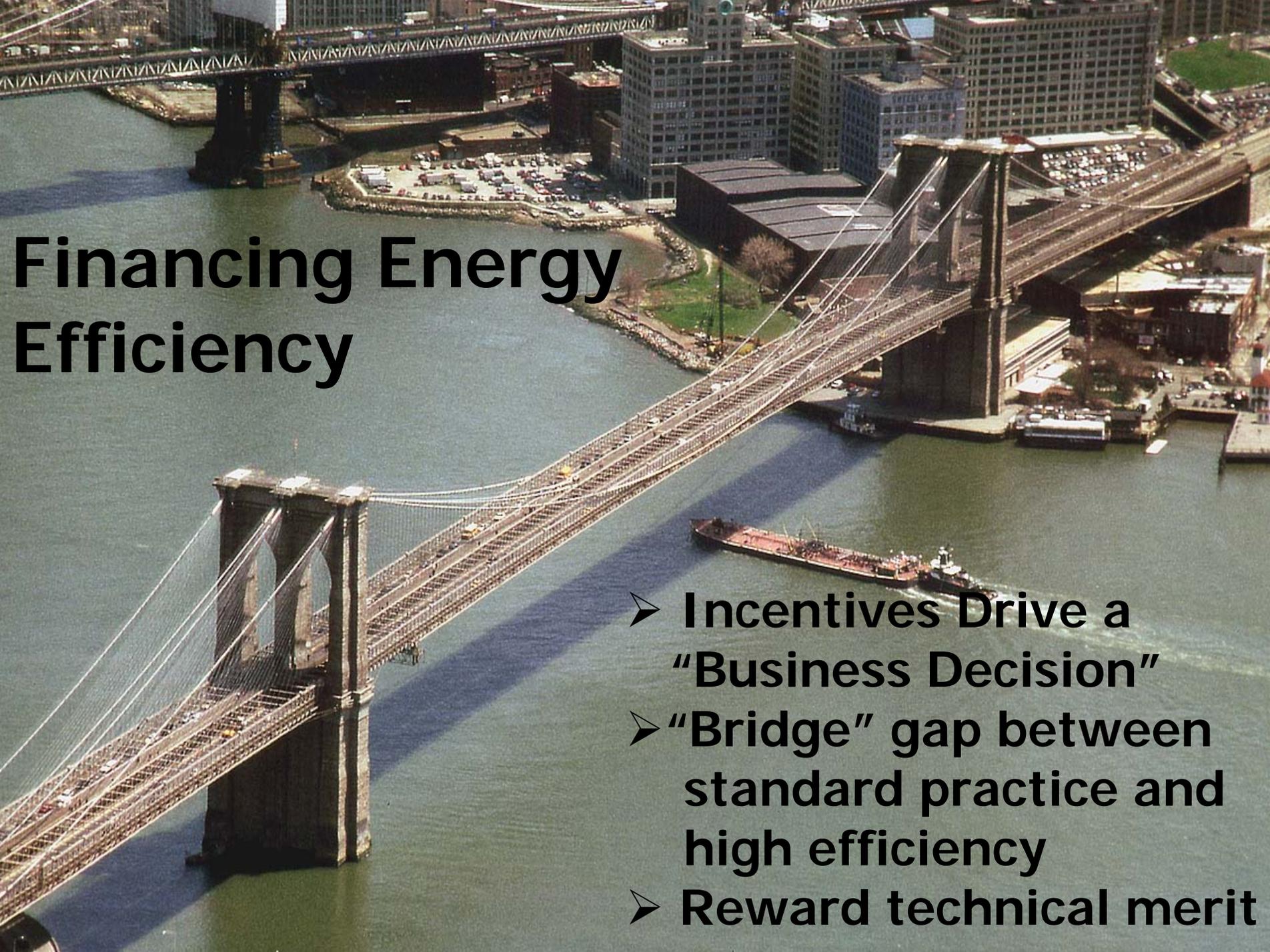
Financial incentives
Technical assistance

Demand Response & Energy Efficiency



- Market transformation
- Customer Choice
- Grid reliability
- Economic Development
- Environmental Stewardship





Financing Energy Efficiency

- Incentives Drive a “Business Decision”
- “Bridge” gap between standard practice and high efficiency
- Reward technical merit



Federal Facility Projects

- \$27.3 Million in Project Costs (22 Projects)
- 30.1 Million kWh Annual Savings
- 4,060 kW On-Peak Savings
- \$3.1 Million in NYSERDA Incentives
- Examples: Fort Drum, USPS, O'Brien Federal Bldg., GSA



Keys to Continued Success

- Use all the tools in the toolbox – Energy Efficiency, Load Management, Demand Response, Combined Heat and Power
- Work to create markets with strong business cases – this will attract project developers
- Work with the middle market – ESCO's, Demand Response Providers, etc.
- Value Energy Efficiency and Demand Response equal to generation



NYSERDA

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Saratoga Technology + Energy Park (STEP)



- STEP is a knowledge-based community dedicated to: research, development, and manufacturing of clean-energy and environmental technologies, education and workforce training
- STEP reflects campus-like environment, LEED-rated clustered buildings, innovative technology, and respect for natural pristine pine forest/Adirondack heritage.
- Fosters working relationships: UAAlbany/Albany Nanotech, HVCC, Saratoga Economic Development Corporation, CEG, Town of Malta, and others.
- Important component in the growth of clean-energy and environmental technologies - Help meet the State's 15X15 Plan.





THANK YOU

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